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of cellulosic biomass into fermentable sugars. Amorphous and purified cellulases and hemicellulases from a variety of native and recombinant fungi were evaluated at similar FPU. Saccharification was carried out using several hardwood and softwood substrates, pretreated by either organosolv or steam explosion processes. Results indicated that specific saccharification activity was significantly higher on organosolv pretreated wood than steam exploded wood. In addition the inventors were able to confirm that β -glucosidase helps to improve enzyme efficiency by preventing cellobiose end product inhibition. The presence of phenolic species generated during the steam explosion process may result in a toxic-inhibitory effect that might hinder saccharification. In this regard, the inventors were able to find that enzyme complexes from one fungal species appeared to be more stable in the presence of phenolic species. The results indicate that the hydrolytic efficiency of amorphous enzyme mixtures on pretreated lignocellulosic materials heavily depends on the sensitivities of individual enzymes to products, substrates, and toxic phenolics and on their optimal ratios within multi-enzyme complexes.

The foregoing description of the present invention has been presented for purposes of illustration and description. Furthermore, the description is not intended to limit the invention to the form disclosed herein. Consequently, variations and modifications commensurate with the above teachings, and the skill or knowledge of the relevant art, are within the scope of the present invention. The embodiment described hereinabove is further intended to explain the best mode known for practicing the invention and to enable others skilled in the art

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to utilize the invention in such, or other, embodiments and with various modifications required by the particular applications or uses of the present invention. It is intended that the appended claims be construed to include alternative embodiments to the extent permitted by the prior art.

What is claimed is:

1. A multi-enzyme product comprising isolated enzymes from a *Trichoderma* and exhibiting: a glucoamylase activity of at least about 0.001 U per milligram of dry matter, a β -xylosidase activity of at least about 280 nmol/min/mg of dry matter, a β -glucosidase activity of at least about 454 nmol/min/mg of dry matter, and an α -arabinofuranosidase activity of at least about 100 nmol/min/mg of dry matter, wherein the multi-enzyme product increases the yield of fermentable sugars from Distiller's Dried Grains (DDG) over compositions not including the claimed amount of glucoamylase.

2. The multi-enzyme product of claim 1, wherein the product is a crude fermentation product.

3. The multi-enzyme product of claim 1, wherein the product has been subjected to a purification step.

4. The multi-enzyme product of claim 1, wherein the *Trichoderma* is *Trichoderma reesei*.

5. The multi-enzyme product of claim 1, wherein the product is capable of converting lignocellulosic material to sugars.

6. The multi-enzyme product of claim 1, wherein the fermentable sugars comprise glucose.

7. The multi-enzyme product of claim 1, wherein the DDG is derived from corn.

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